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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/600,518	09/08/2000	Heiko Pintz	FRM-02601	5199

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EXAMINER

WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 02/15/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,518

Applicant(s)

PINTZ, HEIKO

Examiner

Alexis Wachtel

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

Detailed Action

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. With regards to claims 1 and 2, Applicant does not clearly describe what is meant by phrases "warp thread group" and "weft thread group." Examiner assumes that said thread groups refer to the plurality of yarns that make up the claimed textile grating. With regards to claim 1, Applicant does not clearly describe what is meant by the term "foam-like." The boundaries of Applicant's term are indefinite. What is the difference between "foam" and "foam-like"? Examiner assumes said term refers to materials that are foams. Claims 1 and 2 recite the limitation "the individual threads." There is insufficient antecedent basis for these limitations in the claims.
4. The term "high-strength" in claim 1 is a relative term which renders the claim indefinite. The term "high strength" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.
5. Regarding claim 4, the term "preferably" render the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention.

See MPEP § 2173.05(d).

Art Unit: 1771

6. Regarding claim 5, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Also, Applicant does not clearly describe what is meant by the phrase "and are covered with a coating." What exactly is covered? Is Applicant referring to the thread groups which are coated? Examiner assumes that this is so.

7. Claim 6 recites the limitation "the pasty mixture." There is insufficient antecedent basis for this limitation in the claim. In addition the term "preferably" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

8. Regarding claim 7, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,707,903 to Schottenfeld.

Schottenfeld discloses a laminated liner comprising a non-slip pad and sheet covering. The non-slip pad has opposite first and second faces and a plurality of open

Art Unit: 1771

cells extending through the pad from the first face to the second face. The pad is formed of a frictionalizing material to grip the surface when the second face contacts the surface (Abstract). In the preferred embodiment, the non-slip pad **12** is of the type formed from a scrim **20** coated with PVC foam **22**. The scrims are made of natural or synthetic fibers which are either knitted or woven into a network having intermittent openings spaced along the surface of the scrim (Fig. 3, Col 2, lines 17-22). The resulting flexible pad **12** has generally uniform open cells **26** corresponding to the openings of the scrim **20** (Fig. 3, Col 2, lines 34-36). With regards to claim 5, Schottenfeld teaches that the pad is formed by dipping the woven scrim (See above for spacing teaching) **20** in liquid PVC and curing the dipped scrim in an oven. While being cured, a chemical reaction causes gas to be released in the PVC as it solidifies thereby causing voids in the PVC. When the PVC solidifies entirely, the voids remain in the PVC to produce a soft, resilient, elastomeric, foam material (Col 2, lines 29-36).

With regards to claim 1, Schottenfeld fails to teach the woven scrim of his inventive pad as having 8mm spacing between the parallel yarns making up the scrim. It would have been an obvious matter of design choice to have made the scrim with the claimed spacing size, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

With regards to claim 2, Schottenfeld fails to teach that the yarns making the scrim are multifilament yarns. Schottenfeld discloses above that the scrim can be made

Art Unit: 1771

of synthetic fibers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used synthetic multifilament yarns, motivated by the desire to use a yarn produced with less processing steps as associated with staple yarn production.

With regards to claim 4, although the limitations of PVC foam pore sizes are not explicitly taught by Schottenfeld, it is reasonable to presume that said limitations would be met by the teachings of Schottenfeld as set forth above. Support for said presumption is found in the use of similar materials (woven scrim coated with PVC foam) and in the similar production steps (i.e. coating woven scrim with PVC foam) used to produce the foam coated scrim. The burden is upon the Applicant to prove otherwise.

11. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,707,903 to Schottenfeld as set forth above in view of US 4,434,251 to Sasajima et al.

Schottenfeld teaches that the pad is formed by dipping the woven scrim (See above for spacing teaching) **20** in liquid PVC and curing the dipped scrim in an oven. While being cured, a chemical reaction causes gas to be released in the PVC as it solidifies thereby causing voids in the PVC. When the PVC solidifies entirely, the voids remain in the PVC to produce a soft, resilient, elastomeric, foam material (Col 2, lines 29-36). *Examiner assumes that said chemical reaction involves a blowing agent, or a propellant.*

Art Unit: 1771

Schottenfeld as set forth above fails to teach that the coating is formed by a polymer dispersion (emulsion) or made with a plasticizer or cured at a temperature over 100 ° C.

Sasajima et al is directed to PVC foam manufacturing methods and teaches that it is well known to use plasticizers in PVC foam production (Col 1, lines 60-68). Sasajima et al also teaches that it is known to make PVC foam via an emulsion polymerization method (Col 2, lines 15-25). Sasajima et al also discloses that PVC foaming is generally carried out at temperatures ranging from 170° C to 250° C or preferably from 170° C to 240° C. *Examiner takes Official Notice that emulsions are frequently made with water and that the water is evaporated by heating the emulsion at a temperature that would facilitate water's evaporation.* It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a plasticizer in liquid PVC to coat the woven scrim motivated by the desire to obtain a foam coated scrim that has greater flexibility. In addition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the PVC or polymer coating by an emulsion polymerization method motivated by the desire to use a known method for producing foamed PVC. It also would have been obvious to one of ordinary skill in the art at the time the invention was made to have cured the PVC foam at temperatures ranging from 170° C to 250° C or preferably from 170° C to 240° C since it is known in the art that such temperature ranges optimally cure PVC foam.

Art Unit: 1771

Conclusion


12. The prior art of record and not relied upon is considered pertinent to Applicant's disclosure. In addition, the following references are cited for disclosing various aspects of Applicant's invention:

US 5,736,466
US 6,020,275
US 6,228,786B1
US 6,221,796B1
US 6,056,479

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 8:30am to 4:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Terrel Morris, can be reached at (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


CHERYL A. JUSKA
PRIMARY EXAMINER